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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/536,577	03/28/2000	Curtis Lee Cornils	IRI05247	5755
22863	7590	08/10/2005	EXAMINER	
MOTOROLA, INC. 1303 EAST ALGONQUIN ROAD 1L01/3RD SCHAUMBURG, IL 60196			HENEGHAN, MATTHEW E	
			ART UNIT	PAPER NUMBER
			2134	

DATE MAILED: 08/10/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/536,577

Applicant(s)

CORNILS ET AL.

Examiner

Matthew Heneghan

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 May 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,3,4 and 6-15 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,3,4 and 6-11 is/are allowed.
- 6) ☒ Claim(s) 12-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 28 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 14 March 2005 has been entered.
2. In response to the previous office action, Applicant has amended claims 1, 6-8, and 12-15 and cancelled claims 2 and 5. Claims 1, 3, 4, and 6-15 have been examined.

Claim Rejections - 35 USC § 102

3. Claims 12-15 are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 5,592,552 to Fiat.

The Broadcast Encryption method disclosed by Fiat includes a hierarchy of encryption keys, with keys assigned to nodes at each level (see column 12, line 58 to column 13, line 10). The nodes as shown by Fiat (see Figure 3) are organized in a balanced tree, and it is impossible to assign every node a unique set of log r keys

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unless keys are organized in a hierarchical manner. Each node *must* have one key corresponding to each tier of the hierarchy from the top of the tree to that node. Since the encryption device directly uses the memory, the devices must be coupled using electronic circuitry.

Allowable Subject Matter

4. Claims 1, 3, 4, and 6-11 are allowed.

5. The following is an examiner's statement of reasons for allowance:

Claim 1 is allowable because none of the cited art recursively steps to lower levels in view of a compromised node for KEK generation.

Claims 3, 4, 6, and 7 are allowable based upon their dependence upon claim 1.

Claim 8 is allowable because none of the cited art suggests the selection of lower-tier keys from lists of non-compromised keys.

Claims 9-11 are allowable based upon their dependence upon claim 8.

6. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Response to Arguments

7. Applicant's arguments, see Remarks, filed 14 March 2005, with respect to the rejections of claims 1, 3, 4, 6, and 7 under 35 U.S.C. 103 and claims 8-11 under 35 U.S.C. 102 have been fully considered and are persuasive in view of Applicant's amendments. The rejections of claims 1, 3, 4, and 6-11 have been withdrawn.

8. Applicant's arguments filed 14 March 2005 with respect to the rejections of claims 12-15 under 35 U.S.C. 102 have been fully considered but they are not persuasive.

Because Fiat discloses the presence of only log n keys with respect to a leaf, the usage and storing of tier-group specific key exchanging keys is inherent.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew E. Heneghan, whose telephone number is (571) 272-3834. The examiner can normally be reached on Monday-Friday from 8:30 AM - 4:30 PM Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gregory Morse, can be reached at (571) 272-3838.

Any response to this action should be mailed to:
Commissioner of Patents and Trademarks

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P.O. Box 1450
Alexandria, VA 22313-1450

Or faxed to:
(571) 273-3800

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

MEH *MEH*
August 2, 2005

Greg Morse
GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100